MD 118 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

PROPOSED VIDEO DETECTION CAMERAS

a,b,c

PROPOSED VIDEO DETECTION ZONE

a,b,c

PROPOSED LED SIGNALS

1,2,3, 4,5,6

R
Y
G
12"

7,8,9,10

16" COUNTDOWN PEDESTRIAN SIGNAL

EXISTING SIGN TO BE REMOVED

16a

R3-4 (24"x24")

PROPOSED SIGNS

11 12 13 14 15

R10-3(1) (9"x15") W/ APS

16,17

R3-18 (36"x36")

18

R3-1 (36"x36")

19

NORTH MARYLAND 118

M1-5(6) (48"x72")

20,22

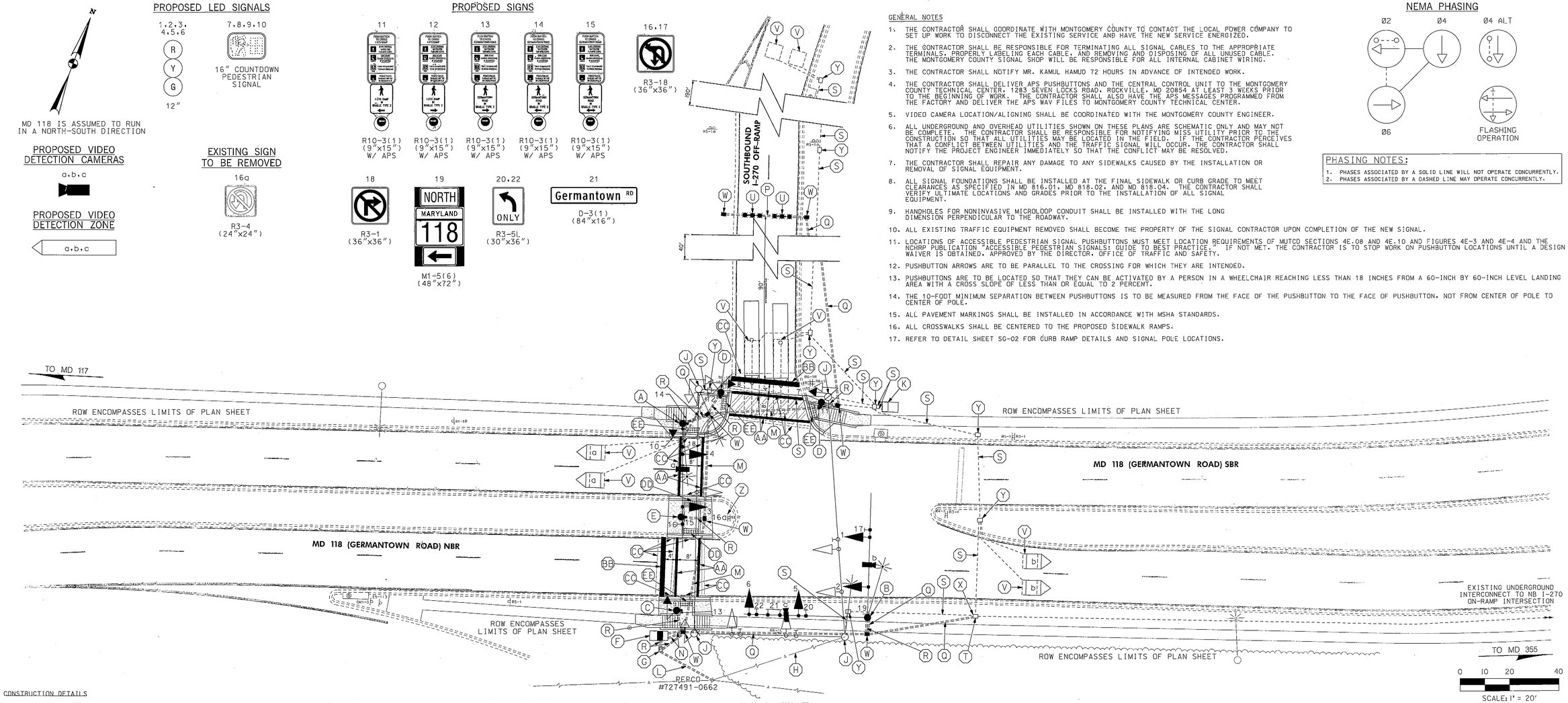
ONLY

R3-5L (30"x36")

21

Germantown RD

D-3(1) (84"x16")



GENERAL NOTES

1. THE CONTRACTOR SHALL COORDINATE WITH MONTGOMERY COUNTY TO CONTACT THE LOCAL POWER COMPANY TO SET UP WORK TO DISCONNECT THE EXISTING SERVICE AND HAVE THE NEW SERVICE ENERGIZED.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS. PROPERLY LABELING EACH CABLE, AND REMOVING AND DISPOSING OF ALL UNUSED CABLE. THE MONTGOMERY COUNTY SIGNAL SHOP WILL BE RESPONSIBLE FOR ALL INTERNAL CABINET WIRING.
3. THE CONTRACTOR SHALL NOTIFY MR. KAMUL HAMUD 72 HOURS IN ADVANCE OF INTENDED WORK.
4. THE CONTRACTOR SHALL DELIVER APS PUSHBUTTONS AND THE CENTRAL CONTROL UNIT TO THE MONTGOMERY COUNTY TECHNICAL CENTER, 1283 SEVEN LOCKS ROAD, ROCKVILLE, MD 20854 AT LEAST 3 WEEKS PRIOR TO THE BEGINING OF WORK. THE CONTRACTOR SHALL ALSO HAVE THE APS MESSAGES PROGRAMMED FROM THE FACTORY AND DELIVER THE APS WAV FILES TO MONTGOMERY COUNTY TECHNICAL CENTER.
5. VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE MONTGOMERY COUNTY ENGINEER.
6. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO THE CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
7. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO ANY SIDEWALKS CAUSED BY THE INSTALLATION OR REMOVAL OF SIGNAL EQUIPMENT.
8. ALL SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE TO MEET CLEARANCES AS SPECIFIED IN MD 816.01, MD 818.02, AND MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE LOCATIONS AND GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
9. HANDHOLES FOR NONINVASIVE MICROLOOP CONDUIT SHALL BE INSTALLED WITH THE LONG DIMENSION PERPENDICULAR TO THE ROADWAY.
10. ALL EXISTING TRAFFIC EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
11. LOCATIONS OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SECTIONS 4E.08 AND 4E.10 AND FIGURES 4E-3 AND 4E-4 AND THE NCHRP PUBLICATION "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE." IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
12. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
13. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18 INCHES FROM A 60-INCH BY 60-INCH LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2 PERCENT.
14. THE 10-FOOT MINIMUM SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM THE FACE OF THE PUSHBUTTON TO THE FACE OF PUSHBUTTON, NOT FROM CENTER OF POLE TO CENTER OF POLE.
15. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MSHA STANDARDS.
16. ALL CROSSWALKS SHALL BE CENTERED TO THE PROPOSED SIDEWALK RAMPS.
17. REFER TO DETAIL SHEET SG-02 FOR CURB RAMP DETAILS AND SIGNAL POLE LOCATIONS.

NEMA PHASING

PHASING NOTES:

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE MAY OPERATE CONCURRENTLY.

CONSTRUCTION DETAILS

A. INSTALL CONCRETE FOUNDATION AND 27 FT. STEEL POLE WITH 50 FT. MAST ARM, LED TRAFFIC SIGNAL HEADS (MAST ARM MOUNTED), VIDEO DETECTION CAMERA (MAST ARM MOUNTED), 20 FT. LIGHTING ARM WITH LED LUMINAIRE AND PHOTOCELL, SIGNS (MAST ARM MOUNTED), LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON, AND R10-3(1) SIGN (TO READ "PUSH BUTTON TO CROSS GERMANTOWN ROAD") (INSTALL 1-3 IN. AND 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).

B. INSTALL CONCRETE FOUNDATION AND 27 FT. STEEL POLE WITH TWIN 50 FT. MAST ARMS, LED TRAFFIC SIGNAL HEADS (MAST ARM MOUNTED), VIDEO DETECTION CAMERAS (MAST ARM MOUNTED), 20 FT. LIGHTING ARM WITH LED LUMINAIRE AND PHOTOCELL, AND SIGNS (MAST ARM MOUNTED AND POLE MOUNTED) (INSTALL 1-3 IN. AND 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).

C. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE (STANDARD NO. MD-801.01-01), LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON, AND R10-3(1) SIGN (TO READ "PUSH BUTTON TO CROSS GERMANTOWN ROAD") (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN POLE BASE).

D. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE (STANDARD NO. MD-801.01-01), LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON, AND R10-3(1) SIGN (TO READ "PUSH BUTTON TO CROSS I-270 RAMP") (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN POLE BASE).

E. INSTALL CONCRETE FOUNDATION WITH 5 FT. STEEL PEDESTAL POLE WITH MODIFIED BREAKAWAY BASE (STANDARD NO. MD-801.01-01), AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON, AND R10-3(1) SIGN (TO READ "PUSH BUTTON TO CROSS GERMANTOWN ROAD") (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN POLE BASE).

F. INSTALL CONCRETE FOUNDATION AND NEMA TYPE 'S' BASE MOUNTED CABINET AND CONTROLLER WITH VIDEO DETECTION INTERFACE EQUIPMENT, UNINTERRUPTIBLE POWER SUPPLY, 2-WIRE CENTRAL CONTROL UNIT AND ALL ASSOCIATED EQUIPMENT (INSTALL 2-2 IN. AND 2-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN CABINET BASE).

G. INSTALL 100 AMP METERED SERVICE PEDESTAL (1-4 IN. AND 3-2 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).

H. DISCONNECT EXISTING OVERHEAD POWER FEED (TO BE DONE BY OTHERS).

J. REMOVE EXISTING STRAIN POLE, SPAN WIRE, AND ALL ASSOCIATED EQUIPMENT. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.

K. REMOVE EXISTING SIGNAL CONTROLLER CABINET. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL. NOTIFY MONTGOMERY COUNTY SIGNAL SHOP TO REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CABINET.

L. INSTALL 4 IN. SCHEDULE 80 PVC ELECTRICAL CONDUIT (TRENCHED) FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE. CAP AND MARK CONDUIT 2 FT. ABOVE GRADE AT PEPCO #727491-0662 FOR USE BY OTHERS. INSTALL 3 1-CONDUCTOR ELECTRICAL CABLE, NO. 2/0 AWG, TYPE THHN FROM THE METER TO THE BASE OF THE UTILITY POLE WITH 35 FT. OF COIL SLACK AT THE BASE OF THE POLE.

M. INSTALL 4 IN. SCHEDULE 80 PVC ELECTRICAL CONDUIT (BORED).

N. INSTALL 4 IN. SCHEDULE 80 PVC ELECTRICAL CONDUIT (TRENCHED).

P. INSTALL 3 IN. SCHEDULE 80 PVC ELECTRICAL CONDUIT (BORED).

Q. INSTALL 3 IN. SCHEDULE 80 PVC ELECTRICAL CONDUIT (TRENCHED).

R. INSTALL 2 IN. SCHEDULE 80 PVC ELECTRICAL CONDUIT (TRENCHED).

S. CAP AND ABANDON EXISTING CONDUIT.

T. DISCONNECT, PULL BACK, AND REROUTE EXISTING INTERCONNECT CABLE THROUGH PROPOSED CONDUIT TO PROPOSED CABINET.

U. INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH 1000 FT. LEAD-IN CABLE.

V. ABANDON EXISTING LOOP DETECTOR. REMOVE ALL ASSOCIATED LEAD-IN CABLE.

W. INSTALL ELECTRICAL HANDHOLE.

X. USE EXISTING HANDHOLE.

Y. REMOVE EXISTING HANDHOLE.

Z. REMOVE EXISTING GROUND MOUNTED SIGN FACE (R3-4) FROM WOOD SUPPORT. EXISTING SUPPORT AND R4-7 SIGN TO REMAIN.

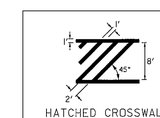
AA. INSTALL 12 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE FOR CROSSWALK.

BB. INSTALL 24 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE FOR STOP LINE.

CC. REMOVE EXISTING PAVEMENT MARKINGS.

DD. INSTALL SIDEWALK CUT-THROUGH (STANDARD NO. MD-655.21) AND DETECTABLE WARNING SURFACE (STANDARD NO. MD-655.40).

EE. INSTALL MODIFIED SIDEWALK RAMP (SEE SG-02) AND DETECTABLE WARNING SURFACE (STANDARD NO. MD-655.40).



GEOMETRIC LEGEND
EXISTING
PROPOSED

UTILITY LEGEND
STORM DRAIN
GAS MAIN
WATER MAIN
SEWER MAIN
ELECTRIC CABLES
AERIAL CABLES
TELEPHONE CABLES
FIBER-OPTIC

McCormick Engineers & Planners Since 1946 Taylor
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Baltimore, Maryland 21202
(410) 662-7400
BY: NJMonaco

APPROVALS
TEAM LEADER
ASST. DIV. CHIEF
DIVISION CHIEF
OFFICE DIRECTOR
ORIGINAL ON FILE

REVISIONS
A RECONSTRUCT EXISTING TRAFFIC SIGNAL 09/09/13 SHA NO. XY2380185 TIMS NO. M005 BSH

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 118 (GERMANTOWN ROAD) AT SOUTHBOUND I-270 OFF-RAMP
GERMANTOWN, MARYLAND

TRAFFIC SIGNALIZATION PLAN

SCALE 1"=20' DATE FEBRUARY 1994 CONTRACT NO. M-401-511-372
DESIGNED BY W. CARLSON COUNTY MONTGOMERY
DRAWN BY R. CICCHINI LOGMILE 15011806.05
CHECKED BY STEVE RENZI T.I.M.S. NO.
F.A.P. NO. T.O.D. NO.
T.S. NO. 3419A SG-01 OF SG-03 SHEET NO. 1 OF 3

PLOTTED: Friday, August 09, 2013 AT 01:17 PM
FILE: I:\5212 - TEDD\23 (PB 181) - MD 118, MD 185 Signals\Design\Engineering\PlanSet\MD 118 at I-270 South Ramp (TS 3419)\pSG-P001_TS3419A.dgn